

- 14 -

CLAIMS

We claim:

1. A spill reducing apparatus suitable for releasable attachment to a cup and
5 lid combination, comprising:
a cup gripping member for gripping the cup, the cup gripping member
comprising a substantially arcuate flexible member;
at least one locking latch coupled to the cup gripping member, the latch being
configured to apply a releasable downward force on the lid; and
10 a flexible sealing member coupled to the gripping member;
the sealing member having a substantially horizontal portion which extends over
the lid and terminates at a lid opening sealing portion.
2. The apparatus of claim 1 wherein the apparatus is made of plastic
15 material.
3. The apparatus of claim 1 wherein the sealing member is spring biased
downwardly to engage the lid, the apparatus including a sealing member actuator
connected to the sealing member to permit the sealing member to be moved sideways
20 relative to the lid.

- 15 -

4. The apparatus of claim 3 wherein the sealing member has a substantially vertical portion and is configured to have a downward spring bias when the apparatus is attached to the cup and lid combination.

5 5. The apparatus of claim 3 wherein the actuator is configured to accept pressure from a left or right finger, the pressure causing the sealing member to lift upwardly and outwardly away from an opening in the lid.

6. The apparatus of claim 3 wherein the cup gripping member and lid
10 engaging portion are configured to cover lid openings of lids having different sizes.

7. The apparatus of claim 6 wherein the cup gripping member comprises attachment prongs and the lid engaging portion comprises a receiving slot for receiving the attachment prongs, the cup gripping member being configured to allow the lid
15 engaging portion to pivotably rotate.

8. The apparatus of claim 1 wherein the sealing member comprises a substantially "S" shaped horizontally flexible member.

- 16 -

9. The apparatus of claim 1 wherein the gripping member has an opening to receive the cup and flexible gripping arms capable of moving away from one another to enlarge the opening.

5 10. The apparatus of claim 9 wherein the gripping member has an inner diameter less than a standard small size cup, and the gripping arms are sufficiently flexible to fit standard large size cups.

11. The apparatus of claim 10 wherein the gripping arms are long enough to 10 extend at least half way around the circumference of the cup.

12. The apparatus of claim 9 wherein the gripping arms terminate at outwardly flared ends.

15 13. The apparatus of claim 1 wherein each locking latch is of a unitary, one piece construction releasably attached to the gripping member.

14. The apparatus of claim 13 wherein each locking latch has a substantially downwardly directed tip portion capable of providing a downward force against a lip 20 portion of the lid.

- 17 -

15. The apparatus of claim 1 wherein the cup gripping member includes at least one retaining channel to receive each latch.

16. An apparatus for sealing a lid opening of a disposable lid in combination with a disposable cup, comprising:

cup gripping arms for securing the cup, the cup gripping arms comprising a substantially arcuate flexible member;

at least one locking latch detachably coupled to the gripping member, the latch being configured to apply a downward force on the lid;

10 a horizontal return spring detachably coupled to the gripping member; and

15 a sealing arm integrated into the horizontal return spring for sealing a lid opening.

17. A spill reducing apparatus suitable for releasable attachment to a disposable cup and lid combination, comprising:

a cup gripping member sized and shaped to securely engage and extend at least one-half way around an outer circumferential surface of the cup;

at least two spaced apart locking latches coupled to the gripping member, each having a lid engaging portion oriented to engage a top surface portion of the lid; and

20 a sealing member coupled to the gripping member, the sealing member having a flexible extension member sized and shaped to engage a top surface portion of the lid.

- 18 -

18. The apparatus of claim 17 wherein the sealing member is an elongate member sized to extend diametrically across the top surface of the lid.

5 19. The apparatus of claim 17 wherein the locking latches and sealing member are discrete components releasably attachable to the cup gripping member.

20. The apparatus of claim 17 wherein the sealing member includes a sip opening cover pivotally connected to the extension member, the sip opening cover having a flat portion to cover the sip opening and being capable of pivoting about the longitudinal axis of the extension member.

15 21. A disposable cup drinking system comprising:
a disposable cup having a mouth, a cup rim adjacent the mouth and a substantially cylindrical outer surface;
a disposable lid having a lid rim sized to engage the cup rim in snap-fit fashion to provide a sealed interface between the cup and lid, the lid having a top surface and a sip opening located adjacent a periphery of the lid; and
a spill reducing device having a cup gripping member sized and shaped to securely engage and extend at least one-half way around the cylindrical outer surface of the cup, at least one locking latch connected to the gripping member and having a lid

- 19 -

engaging portion oriented to engage a top surface of the lid rim so as to prevent the gripping member from sliding away from the cup rim, and a sealing member connected to the gripping member and having a flexible extension member sized and shaped to cover the sip opening.

5

22. The system of claim 21 wherein the gripping member includes a pair of gripping arms each having a thickness no greater than the thickness of the cup rim so as to enable the gripping arms to grip the cup in close proximity to the cup rim without interference from the lid.

10

23. The system of claim 22 wherein the spill reducing device includes at least two spaced apart locking latches, each latch having a lid engaging portion sized and shaped to engage the lid rim in a snap fit manner so as to urge the gripping arms into at least close proximity to the cup rim.

15

24. The system of claim 23 wherein the lid has an annular recess located radially inwardly from and adjacent to the lid rim, each lid engaging portion extending over the lid rim and terminating at a tip portion which projects into the recess.

20

25. The system of claim 21 wherein the extension member extends diametrically over the top surface of the lid and terminates at an end portion which

- 20 -

covers the sip opening, the extension member being sized and shaped relative to the lid to provide a spring bias force urging the end portion against the sip opening.

26. The system of claim 25 wherein the sealing member includes at least one
5 finger engagable member which, when pressed, applies a torque to the extension
member to lift the end portion upwardly away from and to the side of the sip opening.

27. The system of claim 25 wherein the sealing member includes opposing
finger engagable tabs projecting outwardly from the extension member, the tabs being
10 located so that they may be accessed by a cup holder's finger as the cup is being
gripped, each tab when engaged serving to lift the end portion upwardly away from and
to the side of the sip opening.

28. The system of claim 21 wherein the sealing member includes a sip
15 opening cover pivotally connected to the extension member, the sip opening cover
having a flat portion to cover the sip opening and being capable of pivoting about the
longitudinal axis of the extension member.